

REMARKS

Claims 2, 4-24, 26 and 28-49 are pending in the present application. No amendments to the claims are made by this Response. Reconsideration of the claims is respectfully requested.

I. Telephone Interview

Applicant thanks Examiner Nguyen for the courtesies extended to Applicant's representative during the March 25, 2003 telephone interview. During the telephone interview, Examiner Nguyen agreed that the present claims define over the Krembs, Rand and MacFarlane references. As stated on the Interview Summary Sheet, Examiner Nguyen agreed to withdraw the Final Office Action but requested that a formal response be filed for the record. Accordingly, the following remarks are offered as a summary of the arguments presented in the March 25, 2003 telephone interview.

II. Finality of Office Action is Improper

In the March 25, 2003 telephone interview, Examiner Nguyen agreed that the Final Office Action would be withdrawn because the present claims define over the cited art. However, as requested by the Examiner, the following remarks which were presented in the telephone interview are offered for the record.

In Applicant's Response filed December 4, 2002, Applicants amended claims 2 and 26 to be in independent form and to include subject matter of claims 3 and 27 which the Examiner indicated to be allowable. In the present Final Office Action, the Examiner has applied new art. The use of this new art was not necessitated by amendment since Applicants have only amended claims 2 and 26 to include subject matter from claims 3 and 27 indicated as being allowable. The Examiner has prematurely cut-off Applicant's ability to respond to the cited art and the finality of the rejection should be withdrawn.

III. 35 U.S.C. § 103, Alleged Obviousness Based on Krembs and Rand

The Office Action rejects claims 2, 4, 6-8, 19, 20, 26, 29, 31-33 and 45 under 35 U.S.C. § 103(a) over Krembs (U.S. Patent No. 3,585,443) in view of Rand (U.S. Patent No. 4,790,629). This rejection is respectfully traversed.

Krembs is directed to a gas filled box having parallel glass planes with embedded wires that are perpendicular to one another. The gas in the box is allowed to circulate freely through the box in order to provide a more uniform distribution of the ionized gas, resulting in a more uniform firing potential for each electrode pair (column 2, lines 72-75). Individual wires may be addressed so that a voltage is applied to two of the wires. The point where these two wires cross, the voltages add such that the potential difference between the two wires is greater than a firing potential. This causes a discharge at that point.

Since a single gas is provided in the box, the display of Krembs is monochromatic and cannot have a red light emitting element, a green light emitting element, and a blue-light emitting element. Since the Krembs display cannot have the red, green, and blue light emitting elements, the Krembs display cannot have such elements in which each element includes a cell having an anode, a cathode, a gas volume and a phosphorus material. Thus, Krembs does not teach or suggest the light emitting elements recited in independent claims 2 and 26.

Rand does not provide for the deficiencies of Krembs noted above. Rand is directed to a display having a two-dimensional arrangement of triangular cells. Each cell contains four light sources that consist of incandescent bulbs with a filter for providing different colorings. The power to the bulbs is controlled to control the relative intensity of the light of the bulb which may give the appearance of a three-dimensional shape.

Rand does not teach the red, green and blue light emitting elements having an anode, cathode, gas volume, and phosphorus material. To the contrary, the "cells" of Rand are merely incandescent light bulbs with a colored filter. Incandescent light bulbs do not have anodes, cathodes or phosphorus material. Incandescent bulbs include a filament which glows when electrical current is applied. The resulting glow provides light that is allowed to escape through the glass enclosure of the bulb. While a bulb may

have a coloring applied to the glass, such coloring acts as a filter and does not act as a phosphorus material.

In addition, the Rand reference does not teach a three dimensional matrix of light emitting elements. To the contrary, the Rand reference teaches a two dimensional arrangement that may give the impression of a three dimensional shape by changing light intensities (Figure 2A, column 2, lines 50-55). It is not at all clear how the two dimensional display of Rand with incandescent light bulbs and colored filters can be combined with the gas filled box of Krembs that has arrays of glass-enclosed wires that generate discharges when corresponding pairs of wires are energized. The light bulbs of Rand cannot simply be inserted into the box of Krembs without destruction of the very purpose for the configuration of the Krembs display device. In short, the two patents are directed to completely different display apparatus and it is not possible to combine the two.

In view of the above, Applicant's respectfully submit that neither Krembs nor Rand, either alone or in combination, teach or suggest the features of independent claims 2, and 26. At least by virtue of their dependency on claims 2 and 26, respectively, Krembs and Rand do not teach or suggest the features of dependent claims 4, 6-8, 19, 20, 29, 31-33 and 45. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 2, 4, 6-8, 19, 20, 26, 29, 31-33 and 45 under 35 U.S.C. § 103(a). Furthermore, Examiner Nguyen has agreed that the present claims overcome this rejection.

IV. 35 U.S.C. § 103, Alleged Obviousness Based on Krembs and MacFarlane

The Office Action rejects claims 5-13, 21-24, 28, 30-39 and 46-49 under 35 U.S.C. § 103(a) over Krembs in view of MacFarlane (U.S. Patent No. 4,790,629). This rejection is respectfully traversed.

The Krembs reference is discussed above. MacFarlane does not provide for the deficiencies of Krembs. MacFarlane teaches a three-dimensional display device having a three dimensional array of voxels each being connected to a separate optical fiber. Light is transmitted down the optical fiber to the voxel, which is a sphere or polyhedron of a clear, synthetic resin containing a clear dye which takes on a color when energized by a

beam or stream of light. In essence, the voxels are phosphorescent filters at the end of the light conductors where the light exits so that it is viewable to a viewer as a particular point of color. MacFarlane does not teach red, green and blue light emitting elements each including a cell having an anode, a cathode, a gas volume and a phosphorus material. The voxels of MacFarlane do not have an anode, a cathode or a gas volume.

The Office Action alleges that the voxels of MacFarlane act as an anode and a cathode. There is no anode or cathode in the voxels of MacFarlane. To the contrary, the ultraviolet light channeled through the conductor, i.e. the optical fiber, energizes the dye in the voxel which causes the voxel to emit light of a particular color of the dye. There is no anode or cathode in the voxels because it is not necessary to have a discharge for energizing the dye in the synthetic resin of the voxel. Thus, while the dye in the material of the voxel may or may not be a phosphorus material, the voxels still do not contain an anode, a cathode or a gas volume.

In addition to the above, there is no teaching or suggestion in either of MacFarlane or Krembs for the alleged combination. Again, Krembs is directed to a display device in which a gas is allowed to circulate freely and points of light are created by energizing perpendicular glass enclosed wires which, at a point of crossing, create a discharge that generates a point of light. MacFarlane is directed to a three dimensional arrangement of synthetic resin voxels having optical fibers that channel light to the voxels which are energized by the light and cause the dye in the synthetic resin to fluoresce. It is not at all clear how the two completely different display devices may be combined. The voxels of MacFarlane cannot simply be inserted into the gas filled box of Krembs without destroying the very reason for the configuration of Krembs as taught.

Thus, in view of the above, Applicant respectfully submits that neither Krembs nor MacFarlane, either alone or in combination, teach or suggest the features of independent claims 2 and 26. At least by virtue of their dependency on claims 2 and 26, respectively, neither Krembs nor MacFarlane, either alone or in combination, teach or suggest the features of dependent claims 5-13, 21-24, 28, 30-39 and 46-49. Accordingly, Applicant respectfully requests withdraw of the rejection of claims 5-13, 21-24, 28, 30-39 and 46-49 under 35 U.S.C. § 103(a). Furthermore, Examiner Nguyen agreed in the

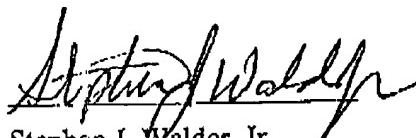
March 25, 2003 telephone interview that the present claims define over the cited combination of Krembs and MacFarlane.

V. Conclusion

In view of the above, and the results of the March 25, 2003 telephone interview, Applicant respectfully urges that the subject application is patentable over Krembs, Rand and MacFarlane and is now in condition for allowance. The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,

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